

## ABSTRACT OF THE DISCLOSURE

An apparatus for transmitting a multi-frame in multiplex transmission, includes (a) a first interface through which a plurality of data traffics is input and output, (b) a second interface through which a SONET/SDH frame is received from a SONET/SDH network and through which a SONET/SDH frame produced by multiplexing the data traffics is output to the SONET/SDH network, (c) a mapper which receives the data traffics through the first interface, maps each of the data traffics, in a multi-frame including SONET/SDH frames by the number equal to or greater than the number of the data traffics, to each of the SONET/SDH frames, and transmits the SONET/SDH frames to the second interface, and (d) a demapper which receives a multi-frame which the second interface receives through the SONET/SDH network, extracts each of the data traffics out of each of SONET/SDH frames constituting the multi-frame, and transmits the thus extracted SONET/SDH frames to the first interface.